What is claimed is:

1. An image signal processing apparatus for forming interpolation data for lines without interlace signal data by detecting motion and for converting image data from an interlace signal to a progressive signal based on the interpolation data, comprising

a processing means for detecting motion at the time of conversion of image data from an interlace signal to a progressive signal by

using data of a present field, one-field delayed data, two-field delayed data, and three-field delayed data,

deciding a function for expressing a moving quantity by an absolute value of a difference of two of the data,

finding a maximum value of a moving quantity of data of a pixel A in the present field at the same position as a pixel R whose motion is to be detected and data of a pixel D at the same position after a two-field delay, a moving quantity of data of a pixel B after a one-field delay one line above the pixel R whose motion is to be detected and data of a pixel E at the same position after a three-field delay, and a moving quantity of data of a pixel C after a one-field delay one line below the pixel R whose motion is to be detected and data

of a pixel F at the same position after a three-field delay and a maximum value of a moving quantity of data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected and data of the pixel D at the same position after a two-field delay and a moving quantity of the data of the pixel A in the present field at the same position as the pixel R whose motion is to be detected and the data of the pixel D at the same position after a two-field delay, and

using the smaller one of the two maximum values found as the moving quantity of the pixel R whose motion is to be detected.

2. An image signal processing apparatus as set forth in claim 1, wherein the processing means uses the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity and uses the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

3. An image signal processing apparatus as set forth in claim 1, wherein the processing means uses the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion

is to be detected for a place of a large moving quantity, while uses an average of the data of the pixel A at the same position in the present field and the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

4. An image signal processing apparatus as set forth in claim 1, wherein, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, said processing means interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, said processing means interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

5. An image signal processing apparatus as set forth in claim 2, wherein, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, said processing means interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, said processing means interpolates by using the average

value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

6. An image signal processing apparatus as set forth in claim 3, wherein, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, said processing means interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, said processing means interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

7. An image signal processing apparatus as set forth in claim 1, wherein said processing means comprises an SIMD control processor including processor elements arranged in parallel one dimensionally.

8. An image signal processing apparatus as set forth in claim 2, wherein said processing means comprises an SIMD control processor including processor elements arranged in parallel one dimensionally.

9. An image signal processing apparatus as set forth in claim 3, wherein said processing means comprises an SIMD control processor including processor elements arranged in parallel one dimensionally.

10. An image signal processing apparatus as set forth in claim 7, wherein said SIMD control processor including processor elements arranged in parallel one dimensionally is a processor for bit processing.

11. An image signal processing apparatus as set forth in claim 8, wherein said SIMD control processor including processor elements arranged in parallel one dimensionally is a processor for bit processing.

12. An image signal processing apparatus as set forth in claim 9, wherein said SIMD control processor including processor elements arranged in parallel one dimensionally is a processor for bit processing.

13. An image signal processing apparatus as set forth in claim 1, wherein said processing means includes a plurality of logic circuits.

14. An image signal processing apparatus for forming interpolation data for lines without interlace signal data by detecting motion and converting image data from an interlace signal to a progressive signal based on the interpolation data, comprising

a processing means for detecting motion at the time of conversion of image data from an interlace signal to a progressive signal by

using data of a present field, one-field delayed data, two-field delayed data, and three-field

delayed data,

deciding a function for expressing a moving quantity by an absolute value of a difference of two of the data,

finding a maximum value of a moving quantity of data of a pixel A in the present field at the same position as a pixel R whose motion is to be detected and data of a pixel D at the same position after a two-field delay, a moving quantity of data of a pixel B after a one-field delay one line above the pixel R whose motion is to be detected and data of a pixel E at the same position after a three-field delay, and a moving quantity of data of a pixel C after a one-field delay one line below the pixel R whose motion is to be detected and data of a pixel F at the same position after a three-field delay and a maximum value of a moving quantity of data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected and data of the pixel A at the same position in the present field and a moving quantity of data of the pixel A in the present field at the same position as the pixel R whose motion is to be detected and data of the pixel D at the same position after a two-field delay, and

using the smaller one of the two maximum values as the moving quantity of the pixel R whose motion is to

be detected.

15. An image signal processing apparatus as set forth in claim 14, wherein the processing means uses the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity, while uses the data of the pixel A at the same position in the present field for a place of a small moving quantity.

16. An image signal processing apparatus as set forth in claim 14, wherein the processing means uses the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity, while uses an average of the data of the pixel A at the same position in the present field and the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

17. An image signal processing apparatus as set forth in claim 14, wherein, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, said processing means interpolates by using the average value of the data at immediately upper

and lower positions in lines above and below, otherwise, said processing means interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

18. An image signal processing apparatus as set forth in claim 15, wherein, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, said processing means interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, said processing means interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

19. An image signal processing apparatus as set forth in claim 16, wherein, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, said processing means interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, said processing means interpolates by using the average value of the data of two central values among a plurality

of pixels in the vicinity of the lines above and below.

20. An image signal processing apparatus as set forth in claim 14, wherein said processing means comprises an SIMD control processor including processor elements arranged in parallel one dimensionally.

21. An image signal processing apparatus as set forth in claim 15, wherein said processing means comprises an SIMD control processor including processor elements arranged in parallel one dimensionally.

22. An image signal processing apparatus as set forth in claim 16, wherein said processing means comprises an SIMD control processor including processor elements arranged in parallel one dimensionally.

23. An image signal processing apparatus as set forth in claim 20, wherein said SIMD control processor including processor elements arranged in parallel one dimensionally is a processor for bit processing.

24. An image signal processing apparatus as set forth in claim 21, wherein said SIMD control processor including processor elements arranged in parallel one dimensionally is a processor for bit processing.

25. An image signal processing apparatus as set forth in claim 22, wherein said SIMD control processor including processor elements arranged in parallel one dimensionally is a processor for bit processing.

26. An image signal processing apparatus as set forth in claim 14, wherein said processing means includes a plurality of logic circuits.

27. An image signal processing apparatus for forming interpolation data for lines without interlace signal data by detecting motion and for converting image data from an interlace signal to a progressive signal based on the interpolation data, comprising:

a first memory for writing and reading of moving quantity obtained by calculation and

a processing means for detecting motion at the time of conversion of image data from an interlace signal to a progressive signal by

using data of a present field and two-field delayed data,

deciding a function for expressing a moving quantity by an absolute value of a difference of two data,

finding a moving quantity of data of a pixel A in the present field at the same position as a pixel R whose motion is to be detected and data of a pixel D at the same position after a two-field delay,

writing this value into the first memory,

reading out from the first memory a moving quantity of data of a pixel B after a one-field delay one

line above a pixel R whose motion is to be detected of one field before and data of a pixel E at the same position after a three-field delay and a moving quantity of data of a pixel C after a one-field delay one line below the pixel R whose motion is to be detected and data of a pixel F at the same position after a three-field delay, and

using these moving quantities to detect motion.

28. An image signal processing apparatus as set forth in claim 27, wherein said processing means

finds a first moving quantity of the data of the pixel A in the present field at the same position as the pixel R whose motion is to be detected and the data of the pixel D at the same position after a two-field delay,

writes this moving quantity into the first memory,

reads out from the first memory a second moving quantity of the data of the pixel B after a one-field delay one line above the pixel R whose motion is to be detected of one field before and the data of the pixel E at the same position after a three-field delay, and a third moving quantity of the data of the pixel C after a one-field delay one line below the pixel R whose motion is to be detected and the data of the pixel F at the same

position after a three-field delay,

finds a fourth moving quantity that is the maximum value of the first moving quantity and the second moving quantity and a fifth moving quantity that is the maximum value of the first moving quantity and the third moving quantity,

uses the smaller value of the fourth moving quantity and fifth moving quantity as the moving quantity of the pixel,

uses the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity, and

uses the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

29. An image signal processing apparatus as set forth in claim 27,

further comprising a second memory for storing a predetermined screen's worth of values, wherein

the processing means

finds a first moving quantity of the data of the pixel A in the present field at the same position as the pixel R whose motion is to be detected and the data of the pixel D at the same position after a two-field

delay,

writes this moving quantity into the first memory,

reads out from the first memory a second moving quantity of the data of the pixel B after a one-field delay one line above the pixel R whose motion is to be detected of one field before and the data of the pixel E at the same position after a three-field delay and a third moving quantity of the data of the pixel C after a one-field delay one line below the pixel R whose motion is to be detected and the data of the pixel F at the same position after a three-field delay,

finds a fourth moving quantity that is the maximum value of the first moving quantity and second moving quantity and a fifth moving quantity that is the maximum value of the first moving quantity and third moving quantity,

finds a sixth moving quantity that is the smaller value of the fourth moving quantity and fifth moving quantity,

finds an eighth moving quantity that is the maximum value of a seventh moving quantity of data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected and the data of the pixel D at the same

position after a two-field delay and first moving quantity of the data of the pixel A in the present field at the same position as the pixel R whose motion is to be detected and the data of the pixel D at the same position after a two-field delay,

writes a specific initial value to the second memory if the sixth moving quantity is greater than a certain threshold value,

otherwise reduces the data read from the second memory by 1,

writes zero to the second memory if the result is less than 0,

uses the sixth moving quantity as the result of motion detection if the value is zero,

otherwise uses the eighth moving quantity as the result of motion detection,

uses the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity, and

uses the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

30. An image signal processing apparatus as set forth in claim 28, wherein the processing means uses the

data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity and uses an average of the data of the pixel A at the same position in the present field and the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

31. An image signal processing apparatus as set forth in claim 29,wherein the processing means uses the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity and uses an average of the data of the pixel A at the same position in the present field and the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

32. An image signal processing apparatus as set forth in claim 27, wherein, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, said processing means interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, said processing means interpolates by using the average

value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

33. An image signal processing apparatus as set forth in claim 28, wherein, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, said processing means interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, said processing means interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

34. An image signal processing apparatus as set forth in claim 29, wherein, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, said processing means interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, said processing means interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

35. An image signal processing apparatus as set

forth in claim 27, wherein said processing means comprises an SIMD control processor including processor elements arranged in parallel one dimensionally.

36. An image signal processing apparatus as set forth in claim 28, wherein said processing means comprises an SIMD control processor including processor elements arranged in parallel one dimensionally.

37. An image signal processing apparatus as set forth in claim 29, wherein said processing means comprises an SIMD control processor including processor elements arranged in parallel one dimensionally.

38. An image signal processing apparatus as set forth in claim 35, wherein said SIMD control processor including processor elements arranged in parallel one dimensionally is a processor for bit processing.

39. An image signal processing apparatus as set forth in claim 36, wherein said SIMD control processor including processor elements arranged in parallel one dimensionally is a processor for bit processing.

40. An image signal processing apparatus as set forth in claim 37, wherein said SIMD control processor including processor elements arranged in parallel one dimensionally is a processor for bit processing.

41. An image signal processing apparatus as set forth in claim 27, wherein said processing means includes

a plurality of logic circuits.

42. An image signal processing method for forming interpolation data for lines without interlace signal data by detecting motion and for converting image data from an interlace signal to a progressive signal based on the interpolation data, comprising,

a step of detecting motion at the time of conversion image data from an interlace signal to a progressive signal, comprising the steps of

using data of a present field, one-field delayed data, two-field delayed data, and three-field delayed data,

deciding a function for expressing a moving quantity by an absolute value of a difference of two of the data,

finding a maximum value of a moving quantity of data of a pixel A in the present field at the same position as a pixel R whose motion is to be detected and data of a pixel D at the same position after a two-field delay, a moving quantity of data of a pixel B after a one-field delay one line above the pixel R whose motion is to be detected and data of a pixel E at the same position after a three-field delay, and a moving quantity of data of a pixel C after a one-field delay one line below the pixel R whose motion is to be detected and data

of a pixel F at the same position after a three-field delay and a maximum value of a moving quantity of data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected and data of the pixel D at the same position after a two-field delay and a moving quantity of the data of the pixel A in the present field at the same position as the pixel R whose motion is to be detected and the data of the pixel D at the same position after a two-field delay, and

using the smaller one of the two maximum values as the moving quantity of the pixel R whose motion is to be detected.

43. An image signal processing method as set forth in claim 42, which uses the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity and uses the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

44. An image signal processing method as set forth in claim 42, which uses the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity and uses an average of

the data of the pixel A at the same position in the present field and the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

45. An image signal processing method as set forth in claim 42, which, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

46. An image signal processing method as set forth in claim 43, which, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above

and below.

47. An image signal processing method as set forth in claim 44, which, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

48. An image signal processing method for forming interpolation data for lines without interlace signal data by detecting motion and for converting image data from an interlace signal to a progressive signal based on the interpolation data, comprising,

a step of detecting motion at the time of conversion image data from an interlace signal to a progressive signal, comprising the steps of

using data of a present field, one-field delayed data, two-field delayed data, and three-field delayed data,

deciding a function for expressing a moving quantity by an absolute value of a difference of two of

the data,

finding a maximum value of a moving quantity of data of a pixel A in the present field at the same position as a pixel R whose motion is to be detected and data of a pixel D at the same position after a two-field delay, a moving quantity of data of a pixel B after a one-field delay one line above the pixel R whose motion is to be detected and data of a pixel E at the same position after a three-field delay, and a moving quantity of data of a pixel C after a one-field delay one line below the pixel R whose motion is to be detected and data of a pixel F at the same position after a three-field delay and a maximum value of a moving quantity of data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected and data of the pixel A at the same position in the present field and a moving quantity of data of the pixel A in the present field at the same position as the pixel R whose motion is to be detected and data of the pixel D at the same position after a two-field delay, and

using the smaller one of the two maximum values as the moving quantity of the pixel R whose motion is to be detected.

49. An image signal processing method as set forth in claim 48, which uses the data obtained by intra-field

interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity and uses the data of the pixel A at the same position in the present field for a place of a small moving quantity.

50. An image signal processing method as set forth in claim 48, which uses the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity and uses an average of the data of the pixel A at the same position in the present field and the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

51. An image signal processing method as set forth in claim 48, which, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

52. An image signal processing method as set forth in claim 49, which, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

53. An image signal processing method as set forth in claim 50, which, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

54. An image signal processing method for forming interpolation data for lines without interlace signal data by detecting motion and for converting image data

from an interlace signal to a progressive signal based on the interpolation data, comprising,

a step of detecting motion at the time of conversion image data from an interlace signal to a progressive signal, comprising the steps of

using data of a present field and two-field delayed data,

deciding a function for expressing a moving quantity by an absolute value of a difference of the two data,

finding a moving quantity of data of a pixel A in the present field at the same position as a pixel R whose motion is to be detected and data of a pixel D at the same position after a two-field delay,

writing this value into a first memory,

reading out from the first memory a moving quantity of data of a pixel B after a one-field delay one line above a pixel R whose motion is to be detected of one field before and data of a pixel E at the same position after a three-field delay and a moving quantity of data of a pixel C after a one-field delay one line below the pixel R whose motion is to be detected and data of a pixel F at the same position after a three-field delay, and

using these moving quantities to detect motion.

55. An image signal processing method as set forth in claim 54, further comprising the steps of

finding a first moving quantity of the data of the pixel A in the present field at the same position as the pixel R whose motion is to be detected and the data of the pixel D at the same position after a two-field delay,

writing this moving quantity into the first memory,

reading out from the first memory a second moving quantity of the data of the pixel B after a one-field delay one line above the pixel R whose motion is to be detected of one field before and the data of the pixel E at the same position after a three-field delay and a third moving quantity of the data of the pixel C after a one-field delay one line below the pixel R whose motion is to be detected and the data of the pixel F at the same position after a three-field delay,

finding a fourth moving quantity that is the maximum value of the first moving quantity and the second moving quantity and a fifth moving quantity that is the maximum value of the first moving quantity and the third moving quantity,

using the smaller value of the fourth moving quantity and fifth moving quantity as the moving quantity

of the pixel,

using the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity, and

using the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

56. An image signal processing method as set forth in claim 54, further comprising the steps of

finding a first moving quantity of the data of the pixel A in the present field at the same position as the pixel R whose motion is to be detected and the data of the pixel D at the same position after a two-field delay,

writing this moving quantity into the first memory,

reading out from the first memory a second moving quantity of the data of the pixel B after a one-field delay one line above the pixel R whose motion is to be detected of one field before and the data of the pixel E at the same position after a three-field delay and a third moving quantity of the data of the pixel C after a one-field delay one line below the pixel R whose motion is to be detected and the data of the pixel F at the same

position after a three-field delay,

finding a fourth moving quantity that is the maximum value of the first moving quantity and second moving quantity and a fifth moving quantity that is the maximum value of the first moving quantity and third moving quantity,

finding a sixth moving quantity that is the smaller value of the fourth moving quantity and fifth moving quantity,

finding an eighth moving quantity that is the larger value of a seventh moving quantity of data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected and the data of the pixel D at the same position after a two-field delay and first moving quantity of the data of the pixel A in the present field at the same position as the pixel R whose motion is to be detected and the data of the pixel D at the same position after a two-field delay,

writing a specific initial value to a second memory for storing a predetermined screen's worth of values if the sixth moving quantity is greater than a certain threshold value,

otherwise reducing the data read from the second memory by 1,

writing zero to the second memory if the result is less than 0,

using the sixth moving quantity as the result of motion detection if the value is zero,

otherwise using the eighth moving quantity as the result of motion detection,

using the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity, and

using the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

57. An image signal processing method as set forth in claim 55, which uses the data obtained by intra-field interpolation from pixels B and C at lines above and below the pixel R whose motion is to be detected for a place of a large moving quantity and uses an average of the data of the pixel A at the same position in the present field and the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

58. An image signal processing method as set forth in claim 56, which uses the data obtained by intra-field interpolation from pixels B and C at lines above and

below the pixel R whose motion is to be detected for a place of a large moving quantity and uses an average of the data of the pixel A at the same position in the present field and the data of the pixel D at the same position after a two-field delay for a place of a small moving quantity.

59. An image signal processing method as set forth in claim 54, which, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

60. An image signal processing method as set forth in claim 55, which, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, interpolates by using

the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.

61. An image signal processing method as set forth in claim 56, which, when finding intra-field interpolation data, if the absolute value of the difference of the data at immediately upper and lower positions in lines above and below is less than a certain threshold value, interpolates by using the average value of the data at immediately upper and lower positions in lines above and below, otherwise, interpolates by using the average value of the data of two central values among a plurality of pixels in the vicinity of the lines above and below.